

IMPORTANT NOTICE

Consumer Confidence Report

**EDGEWATER ACRES/ NANTUCKET POINT SERVICE AREA**  
**2010 ANNUAL DRINKING WATER QUALITY REPORT**

INTRODUCTION

The Water & Wastewater Division of the responsible for the provision of the Nantucket Point Service Area. During

GENERAL

Worcester County Department of Public Works is safest possible drinking water to its customers in the the period from January 1 to December 31, 2009, we conducted tests for drinking water contaminants and tested at least once every month for Total Coliform and Fecal Coliform Bacteria as required by Federal and State law. We detected several contaminants and all were found to be significantly below established standards.

This brochure is a snapshot of the quality of the water that was provided to you in 2009. Included are details about the source of your water, what your water contains, and how your water compares with the standards established by the Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE). If you have any questions about this report or need additional information concerning the drinking water being supplied to you, please call Gary Serman at 410-641-5251, extension 115, between 7:30 a.m. and 4:00 p.m. any weekday.

OUR WATER IS SAFE, HOWEVER

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risks of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

SOURCE OF WATER

We purchased water from Artesian Water Company of Delaware in 2009 and we were supplied by both their South Bethany and Bayville water plants.

INFORMATION

While we do not have regularly scheduled meetings with your community, our personnel are available to answer any questions that you may have or to provide information concerning the operation of the water treatment system. To contact us, you can call Gary Serman at 410-641-5251, extension 115, or you can write to us at 1000 Shore Lane, Berlin, Maryland 21811.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in the water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wild life.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture and residential uses.
- *Radioactive contaminants*, which are naturally-occurring.
- *Organic chemical contaminants*, including synthetic and volatile chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic tanks.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline (800-426-4791).

## EDGEWATER ACRES/ NANTUCKET POINT SERVICE AREA WATER QUALITY

The table below lists all the drinking water contaminants that we detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Under the state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may not be available for all years.

Terms & abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible using the best available treatment technology.
- **Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **ppb:** parts per billion or micrograms per liter ● **ppm:** parts per million or milligrams per liter ● **pCi/l:** picocuries per liter (a measure of radiation)

		Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Level Detected	Annual Range	
<b>Inorganic Contaminants</b>						
Arsenic	ppb	10	0	3	nd-3	Erosion of natural deposits
Barium	ppb	2000	2000 <sup>7</sup>	28	12 - 28	Erosion of natural deposits
Fluoride	ppm	2	2 <sup>7</sup>	1.5	0.5 – 1.5	Erosion of natural deposits
Turbidity <sup>1</sup>	ntu	5	1	0.4	nd – 0.4	Soil runoff.
<b>Radiological Contaminants</b>						
Radium 228	pCi/l	5	0	1.9	nd-1.9	Erosion of natural deposits
<b>Disinfection/Disinfection By-products</b>						
Chlorine (free and total)	ppm	4 (MRDL)	4 (MRDLG) <sup>6</sup>	2.8	0.1 - 2.8	Disinfectant used in drinking water
Haloacetic Acids, total <sup>3</sup>	ppb	60	0	16.6	16.6	By-product of drinking water disinfection
Trihalomethanes, total <sup>3</sup>	ppb	80	0	54.5	54.5	By-product of drinking water disinfection
<b>Unregulated Contaminants</b>						
Alkalinity, total	ppm	n/r		189	98 – 189	
Carbon dioxide, free	ppm	n/r		12	5.6 – 12	
Chloride	ppm	n/r	250	31	19.7 – 31	
Conductivity	umhos	n/r		442	297 – 442	
Hardness, calcium	ppm	n/r		96	54 – 96	
Hardness, total	ppm	n/r		115	81 – 115	
Iron	ppb	n/r	300	100	40 – 100	
Manganese	ppb	n/r	50	6	5 – 6	
pH, Field	0 - 14 scale	n/r	6.5 – 8.5	8.3	6.7 – 8.3	
Phosphate, total	ppm	n/r		0.3	0.2 – 0.3	
Sodium	ppm	n/r		44	27 – 44	
Solids, total dissolved	ppm	n/r	500	248	177 - 248	
Surfactants, MBAS	ppb	n/r	500	20	nd-20	
<b>Lead &amp; Copper<sup>2</sup></b>						
90th Percentile Lead (2009 Data)	ppm	15	0	0.006		Corrosion of household plumbing
90th Percentile Copper (2009 Data)	ppm	1.3	1.3	0.159		Corrosion of household plumbing
<b>Microbiological Contaminants</b>						
<b>Total Coliform</b>						
Highest number of positive samples in any one month		One sample per month was collected by Worcester County personnel on the Maryland portion of the water distribution system and all samples were negative. However in the Delaware portion of the water distribution system two samples were positive in October 2009. (All resamples were absent for bacteria). Negative results in all remaining monthly samples collected. 10 samples per month were collected.				Naturally present in the environment


<sup>1</sup>This MCL applies only to surface water systems.

<sup>2</sup>Under the Lead and Copper Rule, we sample for these contaminants once every 3 years.

<sup>3</sup>Highest 4-quarter average of samples collected and used by the State Division of Public Health for compliance.

<sup>4</sup>Range includes all samples tested for, whereas highest level detected is based upon the highest 4-quarter average.

<sup>6</sup>The U.S. Environmental Protection Agency sets the MRDLG for chlorine residual at 4 parts per million (ppm). Artesian Water strives to meet a range of 1.0 to 4.0 ppm.

<sup>7</sup>Although EPA sets the “goal” at the same level as the maximum contaminant level for these contaminants Artesian Water strives to maintain levels below the MCL.

**The following chemicals were tested for but not found during 2009:**

Inorganic Contaminants	Synthetic Organic Contaminants (Pesticides and Herbicides)		Volatiles
Aluminum	2,4,5-TP (Silvex)	Diethylphthalate	1,1,1,2-Tetrachloroethane
Antimony	2,4-D	Dimethyl phthalate	1,1,1-Trichloroethane
Beryllium	3-Hydroxycarbofuran	Di-n-butylphthalate	1,1,2,2-Tetrachloroethane
Cadmium	4,4'-DDD	Di-n-octyl phthalate	1,1,2-Trichloroethane
Chromium	4,4'-DDE	Dinoseb	1,1-Dichloroethane
Color, apparent	4,4'-DDT	Endosulfan I	1,1-Dichloroethene
Cyanide	Acenaphthene	Endosulfan II	1,1-Dichloropropene
Mercury	Acenaphthylene	Endosulfan sulfate	1,2,3-Trichlorobenzene
Nickel	Alachlor	Endrin	1,2,3-Trichloropropane
Nitrate	Aldicarb	Endrin aldehyde	1,2,4-Trichlorobenzene
Nitrite	Aldicarb Sulfone	Ethylene Dibromide	1,2,4-Trimethylbenzene
Odor (Threshold Odor)	Aldicarb Sulfoxide	Fluoranthene	1,2-Dichlorobenzene
Selenium	Aldrin	Fluorene	1,2-Dichloroethane
Silver	alpha-BHC	gamma-Chlordane	1,2-Dichloropropane
Sulfate	alpha-Chlordane	Heptachlor	1,3,5-Trimethylbenzene
Thallium	Anthracene	Heptachlor Epoxide	1,3-Dichlorobenzene
Zinc	Atrazine	Hexachlorobenzene	1,3-Dichloropropane
	Benzo(a)anthracene	Hexachlorocyclopentadiene	2,2-Dichloropropane
	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	2-Butanone (MEK)
	Benzo(b)fluoranthene	Lindane	2-Chloroethylvinyl Ether
	Benzo(g,h,i)perylene	Methomyl	2-Chlorotoluene
	Benzo(k)fluoranthene	Methoxychlor	2-Hexanone
	beta_BHC	Metolachlor	3-chloro-1-propene
	bis(2-chloroethyl) ether (BCEE)	Metribuzin	4-Chlorotoluene
	Butachlor	Oxamyl (Vydate)	4-Isopropyltoluene
	Butylbenzylphthalate	PCBs	Acetone
	Carbaryl	Pentachlorophenol	Acrylonitrile
	Carbofuran	Phenanthrene	Benzene
	Chlordane	Picloram	Bromobenzene
	Chrysene	Propachlor	Bromochloromethane
	Dalapon	Pyrene	Bromomethane
	delta-BHC	Simazine	Carbon Disulfide
	Di(ethylhexyl)adipate	Toxaphene	Carbon Tetrachloride
	Di(ethylhexyl)phthalate	Trifluralin	Chlorobenzene
	Dibenzo(a,h)anthracene		
	Dibromochloropropane		
	Dicamba		
	Dieldrin		
Radiological Contaminants			
Gross Alpha Emitters			
Disinfection By-products			
Monobromoacetic Acid			
Bromoform			
Dibromoacetic Acid			